

REMARKS

The specification has been amended on page 5 to provide support for the terminology in claim 16. Applicant submits that this is not new matter in that it is inherent that a (micro)processor has a memory (computer-readable medium) for storing the instructions in a computer program.

In view of this change, Applicant believes that claim 16 is statutory under 35 U.S.C. 101.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

Applicant appreciates the Examiner's diligence in examining the language used in the claims. However, it was never Applicant's intent to indicate that the output signal is a radio frequency signal. Rather, the invention resides in acquiring the content carried by the radio signal substantially distortion-free. Since, as noted by the Examiner, the radio signal is analog while the output signal appears to be digital, Applicant has amended to claims to indicate that the output signal corresponds to the desired content of the radio signal.

Applicant believes that the above changes and explanation answer the Examiner's 35 U.S.C. 112, paragraph 1, rejection of the claims, and respectfully requests withdrawal thereof.

The Examiner has rejected claims 1-4, 6-16 and 18-22 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,275,180 to Dean et al. in view of U.S. Patent 6,559,724 to Rosenberg et al.

The Dean et al. patent discloses a collision warning system in which a (microwave) signal is emitted and reflections of the emitted signal are received by at least two receivers, the received signals being processed in order for a processor to deliver a warning signal to the user if a collision is imminent.

The Rosenberg et al. patent discloses techniques for enhancing gain in a quasi-optic grid array, in which it is established that "...radar and other imaging systems require the transmission of radio frequency ("RF") signals in the microwave and millimeter wave bands."

The object of the subject invention, as indicated in claim 1 (as well as independent claims 14, 16 and 18) is to provide a desired content, which is carried by a radio signal, without distortion. Claim 1 includes the limitation "third means for processing the first signal, as received by the first receiving branch, to obtain a fifth signal".

The Examiner has indicated that this limitation is met by Dean et al. and indicates "(A TO D item 70 of figure 1)".

Applicant believes that the Examiner is mistaken. In particular, the A TO D item 70 of Dean et al. processes a combination of the first signal (from the first receiving branch, i.e., antenna 22, mixer 34 and amplifier 58) and the second signal (from the second receiving branch, i.e., antenna 24, mixer 36 and amplifier 58, the combination being formed by summing amplifier 62. Hence, the A TO D item 70 of Dean et al. does not process "the

first signal, as received by the first receiving branch, to obtain a fifth signal".

Claim 1 further includes the limitation "fourth means for combining the fourth signal and the fifth signal to obtain an output signal, said output signal corresponding to the desired content of the radio signal".

The Examiner has indicated that this limitation is met by Dean et al., and indicates "(item 90 of figure 1, Dean)".

Again, Applicant submits that the Examiner is mistaken. In particular, Dean et al. states, at col. 6, lines 59-67:

"Signals which are not rejected by the coherence detection units and which therefore indicate objects of significant collision risk are passed to a signal processor 90. The signal processor 90 compares the range of these objects with the speed of the automobile carrying the radar system 10. If the object is within a distance equal to the stopping distance of the automobile plus the distance which would be travelled in a two second warning period, the warning buzzer 28 is activated."

From the above, it should be apparent that processor 90 does not combine the signals from the coherence detectors 80 and 82 to obtain an output signal, but rather compares the range of objects represented by these signals to the speed of the automobile and, if appropriate, generates a warning signal.

Applicant further submits that the warning signal does not "corresponding to the desired content of the radio signal", but rather is generated in response to the signals applied to the processor 90 meeting certain requirements.

In addition to the above, Claim 1 includes the limitation "wherein the third signal is used to cancel or at least reduce signal distortions that occur due to time-variations of the receiving channel".

The Examiner indicates that this is met by Dean et al., and states "(Dean teaches reduction in interference between systems, an integral component of Dean's system is the third signal, output of 66 of figure 1; Column 5, Lines 4-10; Dean)".

Again, Applicant submits that the Examiner is mistaken. In particular, Dean et al. states, at col. 5, lines 4-10:

"In order to reduce interference to the system from other collision warning systems, for example mounted on vehicles, the frequency of emitted radiation may be varied according to the direction of travel of the system. A magnetic compass may be used to control a master oscillator so that for a particular angle of magnetic bearings, a particular frequency is emitted."

It should be apparent from the above that Dean et al. is concerned with interference from another system and proposes varying the emitted microwave frequency according to the direction of travel. Applicant submits that this has nothing to do with how the third signal (formed from the first and second signals) is being used in the one system, i.e., "to cancel or at least reduce signal distortions that occur due to time-variations of the receiving channel".

While Applicant concedes that microwave signals may be regarded as radio signals, as indicated in Rosenberg et al., Applicant submits that Rosenberg et al. does not supply that which is missing from Dean et al., i.e., "third means for processing the

first signal, as received by the first receiving branch, to obtain a fifth signal", "fourth means for combining the fourth signal and the fifth signal to obtain an output signal, said output signal corresponding to the desired content of the radio signal" and "wherein the third signal is used to cancel or at least reduce signal distortions that occur due to time-variations of the receiving channel."

In view of the above, Applicant believes that the subject invention, as claimed, is not rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicant believes that this application, containing claims 1-4, 6-16 and 18-22, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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